

IN THE CLAIMS

Sub B1
a1
4. (Original) A rotary cutting head for cutting rock by crushing, comprising:

a support;

a cone cutter rotatably mounted by bearings on the support;

rows of welded-on crushing elements adhered to a base body of the cone cutter by a metallurgical bond, each crushing element comprising a body having a working portion, an opposing mounting portion, and an intermediate portion from which the working and mounting portions extend, each crushing element having a greatest width D at the intermediate portion, and a greatest height H extending from a tip of the working portion to a transition between the intermediate portion and the mounting portion, wherein $H/D < 1.2$.

2. (Original) The cutting head according to claim 1 wherein the cutting head comprises a drill bit having a plurality of the supports, the supports comprising legs.

3. (Original) A crushing element adapted for use on a rotary cone cutter, the crushing element comprising a cemented carbide body having a top working portion, an opposing bottom mounting portion of generally conical shape, and an intermediate portion from which the mounting portion extends, the crushing element having a greatest width D at the intermediate portion, and a greatest height H extending from a tip of the mounting portion to a transition between the intermediate portion and the mounting portion, wherein $H/D < 1.2$.

4. (Original) The crushing element according to claim 3 wherein the mounting portion includes a spigot extending downwardly from a center of a bottom of a conical section of the mounting portion, the spigot extending symmetrically about a central axis of the crushing element.

5. (Original) The crushing element according to claim 3 wherein the mounting portion forms an internal cone angle from 150° to less than 180° .

91 6. (Original) The crushing element according to claim 3 wherein the intermediate portion has a height no greater than 15 mm.

SUB 17
~~7. (Original) A rotary cone cutter adapted to be rotatably mounted on a rotary cutting head, the cone-cutter comprising a base body, and rows of welded-on crushing elements adhered to the base body by metallurgical bonds, each crushing element comprising a body having a working portion, an opposing mounting portion, and an intermediate portion from which the working mounting portions extend, each crushing element having a greatest width D at the intermediate portion, and a greatest height H extending from a tip of the working portion to a transition between the intermediate portion and the mounting portion, wherein $H/D < 1.2$.~~

Claims 8-10 (Canceled)

92 SUB 17
11. (New) The rotary cutting head according to claim 1, wherein the working portion is convexly curved.

12. (New) The crushing element according to claim 3 wherein the working portion is convexly curved.

13. (New) The rotary cone according to claim 7 wherein the working portion is convexly curved.
